# "AXIS BANK"MEASURING PERFORMANCE BY "BSC" DATA SERIES FROM 2007 TO 2016

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***ABSTRACT***

Intangible aspects are gaining great importance in the last decade, more specifically in the performance evaluation of organizations. However, the measurability of these intangible aspects is always critical issue. Aspects such as customer satisfaction their effectiveness, the internal processes or the impact of technology and the process of learning on the performance of an organization cannot be quantified like financial indicators, it is still essential to find innovative methods of quantifying these intangibles. This paper attempts to evaluate the significance of intangible aspects as a tool for performance measurement in the Indian banking sector and quantify them. This is vital since the contemporary methods include only the analysis of financial performance of the banks. However, it does not yield a very effective strategy since the financial performance is the translation of many invisible business processes and performance indicators in a financial service organization such as a bank. Neglect of this makes it difficult for such organizations to frame an efficient strategy for long-term growth. Using the time series data spread over ten years from 2007 to 2016 and 19 indicators for Axis Bank; the relevance of intangible aspects is depicted in the present paper. Although such a technique is complicated and difficult to define and implement, such integration yields superior results as far as performance measurement, evaluation and strategic planning for future development of the bank are concerned. The central banking authority may take the initiative to encourage commercial banks to use such techniques for better organizational strength.

Key words: Performance evaluation, intangible aspects, balanced scorecard

JEL Classification: G21

## I. INTRODUCTION:

The aim of this paper is to think and to develop such a measurement system, which helps the bank in improving its existing system by making modifications in the present environment to the possible extent. Many financial measures reflect results of various intangible aspects of the banks and by concentrating more on them, Indian banks may be able to adopt a more balanced approach to performance management and thereby achieve the desired results. The paper is divided into five sections. Section II explains the

implications of intangible assets in performance evaluation of Indian banks. Section III discusses how performance of a private sector bank like Axis Bank can give a different picture when the analysis is based on both tangible and intangible indicators of the bank performance. Section IV elaborates certain problems faced by such performance evaluation systems, and how these systems require great amount of homework, a strong desire to change and ample resources for system change. Finally, section V concludes with the observation that the initiative by the Reserve Bank of India (RBI) and by adopting a comprehensive evaluation mechanism, one of the biggest service sectors of India, can achieve performance par excellence.

## II. INTANGIBLES AND PERFORMANCE MANAGEMENT OF INDIAN BANKS:

Customer relationship management and innovative "management information" systems are the major factors in the contemporary banking environment, which can bring great success in the Indian banking sector. All these areas focus more on intangibles and hence, it is necessary to emphasize on them for long term strategic designing and success. In the past two decades, the share of intangible assets has virtually doubled in the organizational performance across the board, regardless of the nature of the activity undertaken by the organization. In this line, Kaplan and Norton devised a more holistic concept that broadens the scope of the performance evaluation measures of an organizational functioning in 1992. Known as the Balanced Scorecard (BSC), this system eliminates the limitations of the traditional measurement systems, and provides a comprehensive mechanism for effective formulation, and implementation of the long-term strategy in tune with its short-term objectives. BSC philosophy focuses on following:

- ⇨ Formulating the firm's vision & strategy
- ⇨ Communication of the firm's strategy throughout the organization
- ⇨ Allocation of resources & priority setting as per the long term objectives
- ⇨ Prevention of an organizational downturn through modification of strategies
- ⇨ Linkages between lagging and leading indicators

An independent use of financial indicators does not benefit the process of effective strategy formulation, since a bank's performance interlinks financial indicators with more of intangible indicators. In fact, many intangible business processes and performance indicators can be translated into financial indicators and can be analyzed by adopting techniques like the BSC as far as banking sector is concerned.

The starting point for the use of such a system is determining performance measurement. Its alignment through feedback loops can result in the formulation and execution of effective strategy at all levels of the organization. For any service sector organization, customers are of prime importance, and their behavior and value created by bank among them are major considerations. This is essential for the success of a bank in a competitive environment with the introduction of the foreign banks and private domestic banks. Banks have realized the need to understand their requirements in terms of various products and services. Product and service positioning are the major areas of focus for the banks under these circumstances. Various

performance driver models focusing on culture, strategy, process, structure and people have gained importance in Indian banking.

Guidelines relating to risk-adjusted capital adequacy, poor profitability in the long run, and conceptual and practical failure in achieving growth targets, force banks to focus more on return on equity as the ultimate performance measurement indicator. Along with this, some banks may concentrate on product marketing or growth in volume of business as peripheral objectives. However, these do not sufficiently capture the role of intangible aspects in a bank.

During the last decade, the RBI implemented a more comprehensive alternative - CAMEL, i.e., Capital adequacy, Assets quality, Management, Earning quality and Liquidity. This method is an amalgamation of financial performance indicators with the managerial aspects of organizational performance. It is an improvement over annual financial inspection. However, with the implementation of Basle II Accord from March 2007, and integration with the global financial markets after 2009, the Indian banks need to rethink on the lines of capital requirements, supervisory review and market discipline. This calls for improvements and use of more modern systems that incorporate the correlation between technology and customer relationship management as well as the correlation between technology and human resources along with financial indicators, such as the Balanced Scorecard.

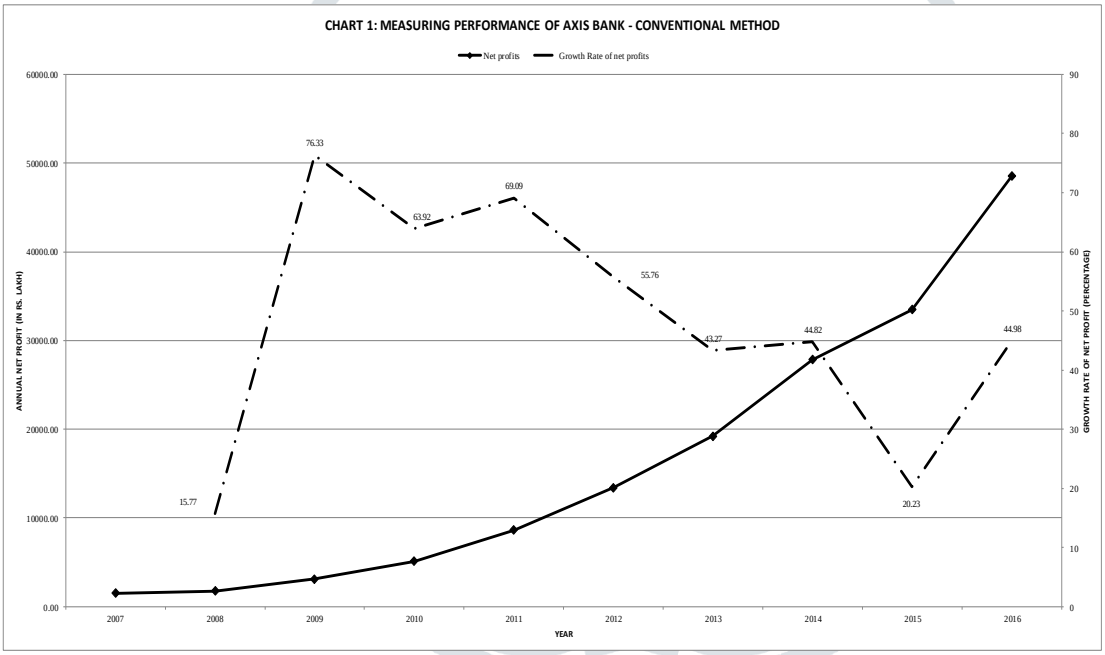
Measuring intangibles looks difficult at the first instance. However, many financial indicators banks can use to analyze performance of a bank from the viewpoint of intangible indicators. For instance, growth rate of deposits indicates customer confidence in the bank. Similarly, growth rate of credit / advances indicates customer preference for the services of a specific bank. Business per employee indicates average productivity of bank employees and hence, the efficiency of internal business process as well as efficiency of technological up gradation. RBI is also recognizing The significance of such ratios and hence it collects data on such indicators. Banks can make a serious attempt to analyze the underpinnings of such ratios and evaluate their performance. With the implementation of Basel I norms by the RBI in 1996, banks started utilizing capital adequacy ratio along with the growth rate of net profits to assess the financial footing of their organization. Many other financial indicators can be utilized to support such analysis. Behavior of the customers can also be analyzed by utilizing several indicators, which show performance in financial terms.

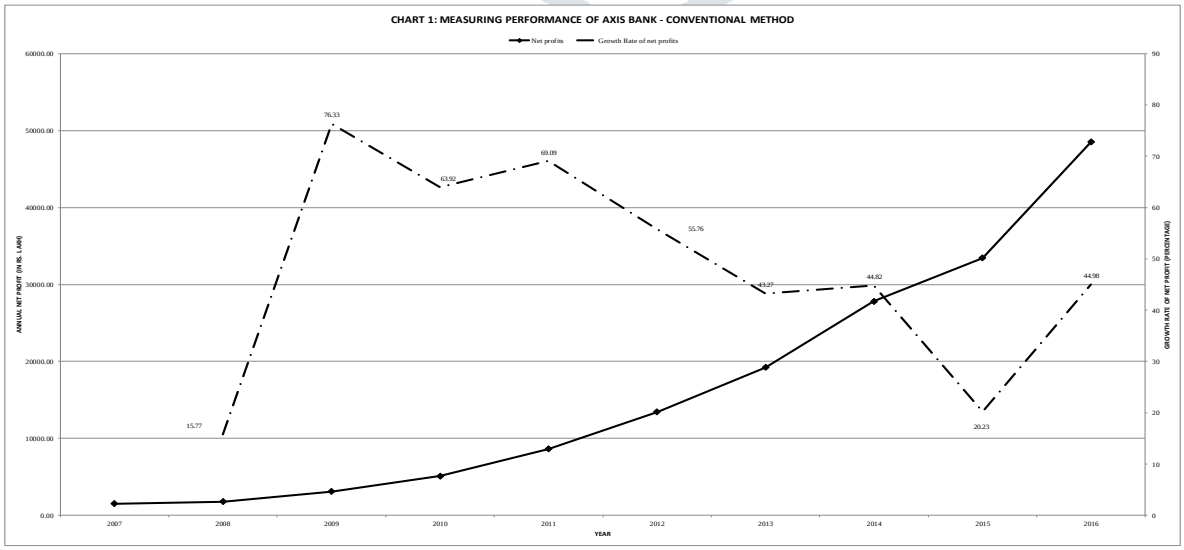
Performance of a bank Axis Bank can be measured in a much more effective manner by using such indicators. This helps in understanding questions like:

- ⇨ What causes certain financial condition of the bank, i.e., high or low growth of profit?
- ⇨ How does the bank attain prescribed capital adequacy norms?
- ⇨ Why does the bank focus more on satisfying customers, in spite of poor financial performance? How does it achieve this objective?
- ⇨ Does the bank continue to operate in apparently non-profit making products?
- ⇨ What is the contribution of employees in the performance of the bank? ... And so on.

## III. PERFORMANCE THROUGH TANGIBLE AND INTANGIBLE INDICATORS:

The progress of Axis Bank is given in chart 1 as far as the annual net profit and its growth rate are concerned. The chart points to a quite erratic performance of the bank. The annual net profit of the bank increased significantly from 2005 to 2006. However, the growth rate of net profits shows consistent decline from 76.33 per cent in 2006 to 20.23 per cent in 2012. The performance of the bank improved in 2013, when its net profit increased at the rate of 40.98 per cent. This points towards the possibility of a serious problem in the functioning of the bank, and a possible downturn of the bank performance during the last decade. This is in spite of a slow and apparently steady increase in the net profit of the bank, as indicated by the upward sloping solid curve in chart 1. The average growth rate of profits is 48 per cent, which is significant at 8 per cent level as compared to the growth rate of profits of all commercial banks, which is just above 28 per cent.



Similarly, chart 2 shows performance of the bank for two more financial indicators: the capital adequacy ratio (including tier I capital shown separately) maintained by the bank and the ratio of net non-performing assets (NPA) to net advances of the bank. The solid line indicates average capital adequacy ratio of all commercial banks in India, that is, 11.84 per cent; while the dashed line indicates the norm for capital adequacy as prescribed by the RBI, that is, nine per cent. It is clear that Axis Bank has maintained high capital adequacy ratio compared to the prescribed rate although its average of 11.27 is below the average maintained by all commercial banks. It is also clear that the bank does not face any trouble with the introduction of Basel II norms, as it has also maintained Tier I capital at a rate greater than the prescribed minimum limit of six per cent.

The ratio of net NPA to net advances increased for the first three years, but then it decreased continuously, and for the last decade it remained at the level of 3.25, which is significantly below the average ratio of 5.15 for all commercial banks (indicated by the dotted line). It must be noted that the ratio of NPA to net advances has been less than two since 2011, which is an extraordinary achievement.

Thus, although the bank has registered erratic performance as far as growth rate of profit is concerned, sufficient capital adequacy and low NPA suggest sound financial performance of the Axis Bank. Can it be concluded that the bank will continue to perform and progress positively in future? The answer to this question requires further analysis of several other performance indicators, which ultimately get translated into sound financial performance. Following this, performance of the bank in case of 16 more indicators from 2004 to 2013 is shown in table 1 below. These are the ratios derived by the RBI to evaluate individual as well as group performance of various commercial banks. The mean and the variance in the first row of each indicator show the performance of Axis Bank, while the same statistics in the second row indicate the performance of all commercial banks in general. The significance of the performance of Axis Bank is measured through the distance of the mean values as well as the variance for each indicator. One-tail Z-test is more relevant since the performance of a specific bank can be superior or inferior as compared to all commercial banks depending upon whether the mean value for the bank is greater or lesser than that for all commercial banks.

The table includes seven more indicators which can be used to measure financial performance of a bank directly. These are cash-deposit ratio, credit-deposit ratio, investment-deposit ratio, ratio of interest income to total assets, ratio of net interest margin to total assets, return on assets and return on equity. Since the bank deals with financial assets and financial products, these indicators are very useful in analyzing the financial management of the bank over and above its profitability. Interestingly, only two out of these seven ratios are statistically insignificant in case of Axis Bank. These are credit-deposit ratio and ratio of interest income to total assets.

While the growth rate of net profits has shown an upward trend of late, the cash-deposit ratio and credit-deposit ratio do not show very encouraging trend. Cash-deposit ratio of Axis Bank is significantly higher

than the average maintained by all commercial banks. This indicates that the bank maintains very high amount of cash, as compared to the other commercial banks of the country. Due to this, the credit expansion by the bank is less than the potential. This is seen in the credit-deposit ratio, which is much less than the average credit-deposit ratio of all commercial banks, though the difference is not significant. On the other hand, the investment-deposit ratio is significantly higher, meaning that the bank has focused more on investing its funds, rather than creating credit.

**TABLE 1: SIGNIFICANCE OF SELECTED PERFORMANCE INDICATORS**

| | Indicator | Mean | Known Variance | z [Hypothesized Mean Difference = 0] | P(Z<=z) one-tail [z Critical: 1.6448536] | P(Z<=z) two-tail [z Critical: 1.959964] |
|---|---|---|---|---|---|---|
| 1 | *Growth Rate of net profits* | 48.24<br>28.16 | 426.61<br>1345.42 | 1.43 | 0.08 | 0.15 |
| 2 | *Capital adequacy ratio* | 11.27<br>11.84 | 2.24<br>0.69 | -1.06 | 0.14 | 0.29 |
| 3 | *Ratio of net NPA to net advances** | 3.25<br>5.15 | 3.43<br>6.18 | -1.93 | 0.03 | 0.05 |
| 4 | *Cash-deposit ratio** | 10.42<br>8.10 | 10.01<br>3.31 | 2.01 | 0.02 | 0.04 |
| 5 | *Credit-deposit ratio* | 52.96<br>57.16 | 84.43<br>38.56 | -1.20 | 0.12 | 0.23 |
| 6 | *Investment-deposit ratio** | 42.71<br>38.49 | 52.77<br>8.02 | 1.71 | 0.04 | 0.09 |
| 7 | *Ratio of interest income to total assets* | 8.53<br>8.33 | 2.15<br>1.29 | 0.34 | 0.37 | 0.73 |
| 8 | *Ratio of net interest margin to total assets** | 1.89<br>3.07 | 0.28<br>0.04 | -6.59 | 0.00 | 0.00 |
| 9 | *Return on assets** | 0.97<br>0.78 | 0.07<br>0.05 | 1.78 | 0.04 | 0.08 |
| 10 | *Return on equity** | 21.19<br>13.73 | 53.13<br>16.86 | 2.82 | 0.00 | 0.00 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 11 | *Ratio of deposits to total liabilities** | 84.01<br>79.73 | 8.49<br>1.76 | 4.23 | 0.00 | 0.00 |
| 12 | *Ratio of term deposits to total deposits** | 77.04<br>62.45 | 127.14<br>2.19 | 4.06 | 0.00 | 0.00 |
| 13 | *Ratio of priority sector advances to total advances** | 19.35<br>32.67 | 102.34<br>6.18 | -3.64 | 0.00 | 0.00 |
| 14 | *Ratio of term loan to total advances* | 37.21<br>41.90 | 671.13<br>75.05 | -0.54 | 0.29 | 0.59 |
| 15 | *Ratio of wage bills to intermediation cost** | 24.90<br>64.28 | 14.20<br>20.17 | -21.24 | 0.00 | 0.00 |
| 16 | *Ratio of wage bills to total expense** | 5.41<br>19.15 | 7.54<br>1.50 | -14.46 | 0.00 | 0.00 |
| 17 | *Ratio of wage bills to total income** | 4.13<br>15.79 | 3.49<br>1.92 | -15.86 | 0.00 | 0.00 |
| 18 | *Business per employee (in Rs. lakh)** | 950.63<br>207.15 | 8137.13<br>11505.68 | 15.97 | 0.00 | 0.00 |
| 19 | *Profit per employee (in Rs. lakh)** | 7.50<br>1.38 | 0.75<br>0.83 | 14.54 | 0.00 | 0.00 |

* Significant at 5 % level.

Note: Calculations based on data compiled from Statistical Tables Relating to Banks of India, Reserve Bank of India. Various issues.

Thus, the bank seems to have deviated from the traditional function of credit creation. Moreover, the bank has not focused more on retail credit. This is unlike many other private sector banks, which have shown an increase in the growth of retail credit. In fact, the retail loans declined from 30 per cent of the total loan book of Rs.25,800 crore in June 2013 to around 23 per cent of loan book of Rs.41,280 crore in June 2014. This is surprising since retail loans guarantee higher interest margins. However, the bank may not want to take a higher risk associated with retail loans.

Subsequently, the interest earnings have suffered. The mean of the ratio of interest income to total assets is 8.53, which is slightly higher than the average of all commercial banks, although this difference is not at all significant. Further, the ratio of net interest margin to total assets has shown an average of 1.89, which is significantly lower than the average of all commercial banks (3.07). This is purely due to high interest costs on the deposits and lower interest earnings due to the extra-precautionary stand taken by the bank in granting credit. The bank must concentrate on increasing both interest income as well as net interest margin, which can increase the profitability. Return on assets and return on equity show a superior performance of Axis Bank as compared to all commercial banks. This is mainly due to reasonably high growth rate of net profits during the last decade. However, return on equity has shown considerable decline, which is a major area of concern.

If no other performance indicators are considered, the above analysis gives a quite gloomy picture of the bank. These financial ratios measure the tangible aspects of bank performance, and give a very strong basis for performance evaluation as well. However, a bank is a service sector organization, and hence, there are many other intangible aspects relating to the customers and internal business processes, contributing to its efficiency. The other nine ratios also appear to be dealing with the financial data. However, they reflect the performance of the bank from different perspectives. For instance, ratios like total deposits to total liabilities, term deposits to total deposits, priority sector advances to total advances and term loan to total advances reflect the behavior of the customers in relation with the products offered by the bank. Similarly, ratios relating to the wage bills, business per employee and profit per employee reflect the soundness of the internal business processes adopted by the bank to carry out its operations. All these indicators can be measured easily and they largely display the intangible aspects of bank performance.

The bank has mobilized large sums of deposits, since the ratio of term deposits to total liabilities is significantly greater than that of all commercial banks. This can be due to the efficient management of deposits on part of the bank and an offer of higher rates of interest. This fact is supported by the previous analysis that the ratio of net interest margin to total assets is low, which is partially due to higher interest expenditure. However, the bank needs to ponder over maintaining this ratio at high level, as there has been quite a lot of variation on the annual basis. Further, the ratio

of term deposits to total deposits is also significantly higher, although it has been declining continuously. Thus the bank needs to take steps to increase customers' confidence in its operations so that its deposit base can be maintained.

However, the bank has not been highly successful in converting its deposit base into larger credit expansion. This is evident from the ratios of priority sector advances to total advances and term loan to total advances. The bank has not been able to meet priority sector lending requirements prescribed by the RBI, and provides significantly less credit to this sector (mean value being 19.35) compared to all commercial banks in general. High risk element and the past experience of relatively higher ratio of NPAs can be the probable reasons behind this. Moreover, the proportion of term loans in total advances is also lesser compared to the average of all commercial banks, indicating that customers do not prefer to borrow long term loans from Axis Bank. This could be due to relatively higher rates of interest on long term loans, supported by observations regarding interest earnings. The bank needs to make its long term loans more attractive, and ensure greater vigilance when granting credit to the priority sector rather than shying away from it.

When it comes to internal business processes, the cost and productivity of employees can be good indicators of performance. Following this logic, three ratios relating to the wage bills are included here. These are ratios of wage bills to intermediation cost, wage bills to total expenses and wage bills to total income. All three are highly significant as compared to all commercial banks. However, the mean values are lower, indicating that the bank spends much less on the wage bills out of its operating cost as well as total cost of running banking operations. Lower mean of the ratio of wage bills to total income suggests that expenditure on employees contributes much less to the revenue generation process of the bank. Interestingly, in spite of low value of ratio of wage bills to total income, the average productivity of the employees is significantly higher compared to all commercial banks. This is reflected in high mean value of business per employee, which is Rs.950.63 lakhs. Further, profit per employee is also significantly higher with the mean value of Rs.7.50 lakhs, as compared to all commercial banks.

This indicates that the bank has performed well as far as earning revenue and generating profit are concerned. However, it needs to concentrate on maintaining high growth of deposits, increase priority sector lending and long term credit facilities in order to maintain sound business performance in the long run.

## IV. BETTER PERFORMANCE EVALUATION SYSTEM:

The previous analysis suggests that incorporating intangible aspects can reveal a more complete picture of bank performance. Simple analysis based on basic financial indicators such as net profit, capital adequacy ratio or NPA alone is not sufficient for this purpose. It is necessary to combine these basic financial indicators with some more financial indicators as well as non-financial indicators to understand the performance of a banking organization and formulate a successful long

term development strategy. However, an apparently attractive and comprehensive performance evaluation system like the BSC has several limitations:

1. ***Defining a balanced set of indicators & incorporating complex set of interrelations:***

The precise nature of an organization's scorecard is often not identified. Hence it is possible to design a wide variety of Balanced Scorecards with various combinations of financial and non-financial measures or those having more comprehensive systems linking operations to various perspectives and to strategy (Ittner et al. 2003; Hoque and James 2000). It is possible to use probabilistic and subjective measures due to technological complexity, uncertainty and interdependence in a service organization like banks. But, these softer measures tend to be manipulated by senior management. The range of measurement may also be compressed, leading to lesser differentiation in assessing the performance of the employees and an overall perception of unfairness (Prendergast and Topel, 1993; Moers, 2005). It is up to the managers to decide to the spread of their efforts over different areas using a highly diverse set of measures. Obviously, this makes designing a BSC more difficult in practice.

Ittner and Larcker (1998) report that more than a third of respondents to a survey by the consulting firm Towers Perrin found it difficult to implant BSC at lower levels within an organization. Complex hierarchical structures contribute to the difficulty of identifying as to how the implied business model translates across the organizational structure. Effective implementation of BSC requires an assurance that the employees are empowered to search for alternatives to respond to strategic uncertainties. This calls for sufficiently open and flexible organizational structures.

2. ***Omission of several leading indicators & hindrance in situation-specific evaluation:***

Ittner et al. (2003) found that financial organizations using a BSC to reward managers had the potential to counter many of the criticisms of short term accounting-based evaluation system. However, the weights assigned to each performance measure used in the BSC differed from manager to manager and organization to organization. While undertaking evaluations and awarding bonuses, some measures were neglected, although these were the leading indicators of the strategic objectives of financial performance and customer growth.

3. ***Assigning different weights to various indicators:***

Even after the indicators have been identified, it is very difficult to assign appropriate weights to these indicators. The tendency may be to assign equal weights to all perspectives and all indicators. However, this is not necessary. The weights may differ as per the significance of an indicator in realizing organizational objectives. Moreover, the importance of an indicator in realizing these objectives is a subjective matter. While the top-level management may think that certain group of indicators is more important than the other, the employees may assign more relevance to a different group of objectives. Such differences in opinion are possible even within the same decision-making group. In this light, some indicators might be overweighed, while the others may get neglected.

4. ***Difficulty in linking with reward:***

Ittner and Larcker (1998) report that scorecards assisted only a minority of managers in understanding the goals and strategies or in relating their jobs to business objectives of their organization. It is observed that managers hardly attempt to link non-financial indicators to the organizational strategies. Only 23 per cent of these managers are found to be able to build causal models and majority of the managers cannot validate the causal links in such models. Managers are also found to have a difficulty in recognizing and working with performance measures under specific situations requiring evaluation. Consequently, they cannot establish a linkage between performance evaluation and their own rewards.

5. ***Cost constraints to design & implementation of innovative systems:***

Techniques like the BSC are expensive to design and implement. The size of the organization is an important factor that determines the extent to which the organization might have resources to experiment with such novel performance measurement systems. Moreover, in case of a bank, which is made up of many branches in different locations, coordination and compilation of data and a common analysis is extremely difficult. Different branches may also be focusing on different set of objectives. For instance, rural branches may concentrate on priority sector lending, while urban branches may have a focus on industrial lending. This requires different set of performance measures, with unique weight systems for specific situations, which escalates costs and renders the implementation process more complicated.

## V. CONCLUSION:

Though an efficient and a comprehensive tool covering various organizational aspects, designing and implementing a single BSC for a bank is a complex procedure. However, it is a crucial time when the Indian commercial banks, like Axis Bank, need to such a system of performance evaluation if they aim at calibrating a business strategy that renders superior performance in future. This is all the more required with the financial reforms being introduced in full swing, and influx of private sector and multinational banks into the economy. The initiative of the RBI to collect data pertaining to many different performance indicators over the past decade can be considered to be a beneficial progress in this direction.

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